Federal Communications Commission
Washington, D.C.

March 22, 2000

DOCKET FILE COPY ORIGINAL

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Re: Acceptance of Motion As Timely Filed in (Docket No. 99-325)

The Office of the Secretary has received your request for acceptance of your pleading in the above-referenced proceeding as timely filed due to operational problems with the Electronic Comment Filing System (ECFS). Pursuant to 47 C.F.R. Section 0.231(I), the Secretary has reviewed your request and verified your assertions. After considering arguments, the Secretary has determined that this pleading will be accepted as timely filed.

However, Motions for Extensions of Time for the Reply Comment period are within the discretion of the bureau. We have forwarded your request in this regard to the

bureau for their consideration. If we can be of further assistance, please contact our office.

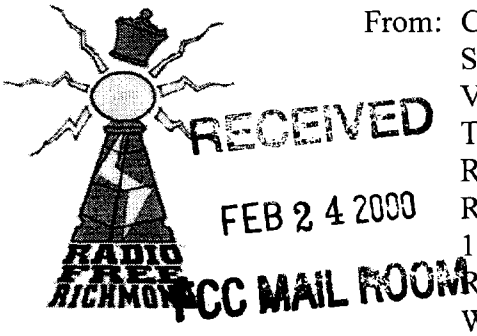
FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
for Magalie Roman Salas
Secretary

Before the
FEDERAL COMMUNICATIONS
COMMISSION
Washington, DC 20554

In the Matter of Digital Audio
Broadcasting Systems and Their
Impact On the Terrestrial Radio

MM Docket No. 99-325
Broadcast Service.



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REPLY-COMMENTS REGARDING DOCKET 99-325

Please Accept this motion as Accepted for Timely Filing
Due to failure of the ECFS systems during February 2000.

Dear FCC Commissioners and staff,

Please pardon the "rough draft" nature of these comments. They are indeed notes that were waiting for full functionality of the ECFS file search system to allow us full access to all the comments provided regarding Docket 99-325.

Thus we did not have access to many of the most important documents and comments in this proceeding.

And so we will be hoping to provide additional comments that might significantly modify this comment-reply when we have full access to all comments.

FCC NPRM 99-325 NOTES:

These are in addendum to comments earlier.

Introduction:

> "1 Digital Audio Broadcasting (DAB) technology is in various stages of development and implementation throughout the world. Its proponents claim that it has the capacity to move the American radio broadcast service 'to the next plateau of audio performance by providing listeners with enhanced sound quality more closely resembling original source material and digital recordings.' Proponents also contend that a DAB system would enable radio broadcasters to offer the public an array of new auxiliary services.' Thus DAB technology has the potential to significantly enhance the American radio broadcast service."

Page 7:

> "In the United States, however, the L-Band is allocated for the purpose of flight test telemetry, (37) and the spectrum around 221 mHz is allocated for the primary purposes of land mobile and amateur use. The CEMA Final Report found that '[o]f all the systems tested, only the Eureka[-147] system offers the audio quality and signal robustness performance that listeners would expect from a new [DAB] service in all reception environments." (38) No proponent of a Eureka-147 or other non-IBOC DAB system has filed comments in response to USADR's Petition. We currently are unaware of any such proponents in the United States.(39)"

VCPP ADDENDUM-COMMENT:]
It appears that the FCC links any consideration of mandatory sunsetting of analog FM with the choosing of an IBOC DAB system:

Page 7:

> "12. The USADR Petition for Rulemaking was filed on Oct 7,1998 (half a year after the petitions that became the LPFM service were filed). USADR urged the commission to take the following regulatory steps:
> ... 3) Adopt 'a transition plan that provides appropriate protection for analog radio for an interim period but also fosters the transition to an all-digital environment"

Page 8:

> "Likewise, with regard to (3), the need to establish a sunset on analog signal protection may depend on the selection of an IBOC system."(45)
>
> "14. With regard to USADR's proposed step (5), many commentaters agreed that the Commission has a role to play not only in the implementation of DAB, but also in fostering the further development of IBOC DAB systems."
>
> "15. ... We begin with the settled determination that fostering the development and implementation of terrestrial DAB is in the public interest (48) We believe that the principles advanced by the Commission in Docket 90-357 regarding the terrestrial radio broadcast service remain valid, and will look to them in developing our approach to a terrestrial DAB service (49). The goal of introducing terrestrial DAB service is most fundamentally grounded on the promise of digital technology to provide vastly improved radio service to the public. It is our goal to authorize a DAB service that permits broadcasters and listeners to realize fully the superior technical performance capabilities of this technology."

VCPP ADDENDUM-COMMENT:]
This presumes that an incremental increase in sound quality from analog FM stereo to "near CD quality" (whatever that might objectively mean in a noisy mobile and office and work environment where radio is mostly used) is of interest to the public.

Duncan Radio Research suggests that the public would actually prefer a wider variety of formats and programming values (owners) with the same level of audio quality. In other words, the best thing that can be done for radio vis-a-vis the listeners is to encourage as many new entrants in the business of producing programming as absolutely possible.

The current DAB proposals actually would produce the opposite, less owners and less stations with less range for less people.

Page9:

> "16. The Commission also remains firmly committed to the related goals of 'supporting a vibrant and vital terrestrial radio service for the public and creating DAB opportunities for existing radio broadcasters.(50). We must ensure that the introduction of DAB does not weaken the vitality of our free, over-the-air radio broadcast service, which provides service to virtually all Americans through a strong, independent system of privately owned and operated stations. (51).

17. A viable DAB system must be spectrum efficient. Our preference is for DAB systems that use the least spectrum. It is the Commission's obligation to ensure that the value derived from the superior transmission capabilities of DAB technology is allocated in a manner consistent with the public interest. In addition, with regard to IBOC DAB systems, we believe that a transition to an all-digital service is an appropriate public policy goal, because the spectrum efficiencies and related new service opportunities inherent in such systems can be realized fully only in an all-digital operational mode."(56)

VCPP ADDENDUM-COMMENT:]
The FCC appears to have come out and STATED THEY ARE PREJUDICED TO AN ALL DIGITAL FM DIAL IF IBOC IS CHOSEN.

Page 10:

"It is equally important that the Commission's DAB technical rules make it possible for manufacturers to produce reasonably-priced digital receivers."

VCPP ADDENDUM-COMMENT:]
This then argues for Eureka 147 at 1400mHz.

And why does the FCC stick to IBOC anyway?

19. ... we continue to believe that IBOC systems hold great promise ... moreover, IBOC is the only approach that to date, has attracted a substantial number of adherents."

VCPP ADDENDUM-COMMENT:]
Luckily this is NOT TRUE.

The NAB themselves were major proponents of Eureka 147 until the FCC shot them down by denying us and the NAB proponents the use of the L-Band!

"20. We propose to apply the following evaluative criteria: (1)enhanced audio fidelity; (2) robustness to interference and other signal impairments; (3) compatibility with existing analog service; (4) spectrum efficiency; (5) flexibility, (6) auxiliary capacity; (7)extensibility; (8) accommodation for existing broadcasters; (9) coverage; and (10) implementation costs/affordability of equipment. The order of these proposed criteria is not intended to imply a hierarchy among them."

VCPP ADDENDUM-COMMENT:]
ALL these argue for Eureka 147 ...

"21 Enhanced Audio fidelity/robustness. Consumer demand for improved audio fidelity is undeniable. (63)

VCPP ADDENDUM-COMMENT:]
NOT TRUE! Footnote 63 indicates Sony carried out a poll that purports to indicate that two thirds of the public want Digital Audio Broadcasting features. But then Sony's OWN comments for 99-325 indicate *repeatedly* that their sales of DAB units in Europe has been flat and disappointing. Sony even

recommends that the FCC "encourages" the digital market by denying us a choice of systems, by mandatorily sunsetting analog FM and FORCING us to buy their products!! Whether we end up agreeing with the Europeans response (yawn) or whether we are impressed, we will have DAB pressed upon us like so many cattle fed to fatten for market!
Obviously, the poll was not done well, since the real world market test has DAB a major flop for Sony. Sony cites the lack of anything "compelling" on the DAB bands. The Broadcast Trusts such as Clear Channel have increase their profits by gutting staff that would have been used to create the "programming innovation" called for by Duncan Radio Research ... why would they suddenly behave 180 degrees opposite by creating new niche programming for DAB?

ALL of the above goals would be enhanced by requiring that ANY DAB receivers MUST have FLASH BIOS so that a person can update to a different, or even multiple decoding schemes. This would also enable the FCC to let the manufactures and the consumers battle out what standard is chosen ... let the marketplace work out which standard ends up winning. Because just as a V.90 56k Flex modem can also use X2, but also the other protocols such as V34, V32, V22 etc. etc. It provides extensibility, cheapness of upgrade, flexibility, everything cited with minimum work for the FCC as well!! It also means that if a great new protocol is invented five years from now, we are not locked into some older protocol.

This would be especially true given FCC NPRM statement on page 13:

> "Flexibility is one of the principle benefits of digital technology. many commenters believe that increasing radio broadcaster's capacity to provide auxiliary services will be an important benefit of DAB technology. ... We currently provide broadcasters with a great deal of freedom with regard to subcarrier usage and believe that a similar approach to regulating augmented auxiliary capacity would likewise be in the public interest."

VCPP ADDENDUM-COMMENT:]
Flash ROM BIOS would provide that flexibility. However, if the FCC is going to allow the Broadcasters to create private data LAN's on our public airwaves, then for every dollar they earn on their SCA channels for "auxiliary services" should result in a dollar of reduced advertising time or perhaps donated time to local nonprofit agencies in the area to create programming. With 35+% profits, this would cause no hardship and would provide a public benefit roughly equivalent to creating more competition that a narrower bandwidth would provide. If there is to be no trade for SCA use, then that spectrum must be turned over for auction or for new entrants to provide that "second rate information delivery services" for which 13,000 requests were made in 1997.

Page 12:

> "27. This proceeding also presents an opportunity to consider the spectral efficiencies that could be realized by advances in receiver technology over the decades since the analog interference standards were established. We not that analog receivers can now be designed with improved frequency selectivity to better reject potentially interfering signals on adjacent channels. (72) Although IBOC systems are based on existing analog protection criteria we wish to examine the extent to which state-of-the-art receiver technology may provide additional protection against interference, and thereby facilitate more intensive spectrum utilization."

VCPP ADDENDUM-COMMENT:]

It is obvious from some commenters remarks, one commenter calling for "*only* 430kHz bandwidth" verses the 70kHz required by USADRs DAB signal that there is obviously little concern among the proponents of IBOC for consumer's receiver's ability to separate signals. Odd that they were so concerned during the LPFM proceedings and yet there seems to be virtually NO concern during these proceedings! Not even for the existing 2nd adjacent Full Power Grandfathered Short Spaced stations!

Therefore, recommendation: Off Band solution using 100kHz slots with only 1st adjacent protection would provide for a maximization of the number of outlets. There should also be NO guarantee of access for existing broadcasters, they should compete as new entrants for the DAB slots as would anyone else. Furthermore, in the interests of maximum diversity, the DAB stations should have similar Ownership provisions as the LPFM stations. Note that Greater Media etc. have essentially attempted to blackmail the FCC, that if they are not allowed to create what amount to beeper networks on their subcarriers, they will in-effect "take their ball and go home" since they are apparently uninterested in being a "second-rate information delivery system."
Since they are allowed to make a profit as a side benefit of providing us a Free Press, not simply because they got to the public commons (trough) first ... there is no guarantee that they are allowed to gorge themselves on the wireless Internet revolution on their subcarriers at our expense.
Their PRIMARY EXISTENCE is to be "second-rate information delivery services." NOT BEEPER NETWORKS!!!

If they want more bandwidth for proprietary packet data delivery , let them pay for it at auction as have the cell phone and nonFM SCA beeper networks.

Page 14:
VCPP ADDENDUM-COMMENT:]
The FCC apparently finds that their job is to enforce monopoly and not create competition, yet they have cited the competition clauses of the 1996 Telecom Act in creating the LPFM. Why the discrepancy?

> "32. Accommodation for existing broadcasters. We tentatively conclude that any DAB system should, to the maximum extent possible, accommodate all existing broadcasters that desire to initiate DAB system transmissions. A digital service that permits both AM and FM stations to provide the same level of enhanced audio quality also would be of significant benefit to broadcasters and listeners."

VCPP ADDENDUM-COMMENT:]
Then they contradict themselves, practically in the same breath. Next sentence:

> "We tentatively conclude, however, that placing AM and FM broadcasters on equal footing in terms of signal quality is not an essential DAB technical requirement. "

VCPP ADDENDUM-COMMENT:]
Translation, equity would be nice, but the FM Broadcasting Trust would hand us our heads on a platter if suddenly owners of AM stations were just as good as the expensive FM stations owner's signals. If we choose an OFF-BAND solution, we will get crucified by the FM Broadcast owners.

Page 14:

"34 (10) Implementation costs/affordability of transmission and receiver equipment. Minimizing implementation costs of any DAB model and/or system is a fundamental means of ensuring a rapid and non-disruptive transition to DAB. One important benefit of an IBOC model appears to be its ability to allow broadcasters to build on the existing broadcast infrastructure ... With regard to affordability, the Petition points out that the relatively low cost of receivers contributes to the radio broadcast service's unmatched penetration."

VCPP ADDENDUM-COMMENT:]
The FCC seems more concerned about cost to the broadcasters than the consumers.
Even so, Eureka 147 would STILL provide the cheapest answer since they could use the same equipment as are produced for the entire planet. Furthermore, the FCC could simply allow enough flexibility in geographic placement and adjacent frequency placement that broadcasters could use the same antenna towers. Furthermore, of course, consumers would be able to IMMEDIATELY access a world market for Eureka 147 receivers already in use all over the planet. No retooling would be necessary, just different stickers for labeling switches in English (or immediate importation of British and Canadian receivers).

NOTE: THE FCC ACTS AS IF L-BAND DECISION OF 1992 IS INVIOLATABLE.
Why?

The military works for the civilian government, not the other way.
The U.S Government is "Of, by and for the people"., not the military.
A healthy Free Press is a vital part of a healthy democracy that the military is sworn to uphold.

Therefore it is the DUTY OF THE MILITARY TO GIVE UP THE L-BAND!

There is no doubt that a revisitation of this issue in light of the MASSIVE support for the LPFM service could push the lazy military back to another frequency, why not one of the higher amateur bands? We could "sunset" the AM Broadcast Band and give that to the amateurs if their political pull can exceed that off the thousands upon thousands who now support the increased competition of the LPFM ... who's interest would be harmed by IBOC sunsetting of analog FM!

Page 15:

" proponents content that IBOC ... would be spectrally efficient, in that it would not require a new spectrum allocation (81) and consequently, "administratively efficient" because this approach would not raise new spectrum allocation and licensing issues."

VCPP ADDENDUM-COMMENT:]
This would ONLY be true if the FCC DOES NOTHING. That is requires broadcasters to transmit DAB down their existing 137kHz subcarriers contained within their existing 200kHz mask ... and require that DAB receivers have FLASH BIOS thus allowing the marketplace to decide what kind of protocol (or which of many) to use with very easy upgrade of receivers enabled thusly.
ANY OTHER APPROACH WILL INCREASE THE WORK LOAD FOR THE FCC.

Hey! Who is the FCC working for here? :

"Finally they contend that IBOC would enable stations to preserve their current frequency identities and coverage areas, service features that are important to broadcasters ..."

VCPP ADDENDUM-COMMENT:]
Again, we see the FCC is prejudiced toward this Digital Disaster of IBOC:

"37. We believe that those arguments have merit and that a workable IBOC system would be superior to a new-spectrum DAB system in several respects. It would not require new spectrum ..."
SN]NOT TRUE. The worst of the proponents want to expand to 430kHz, they would more than double the amount of bandwidth used per station, and several proponents are quite blatant to the point of near-blackmail that they intend to use that extra bandwidth for "auxiliary services" such as mobile beepers and proprietary fee-based mobile digital packet information such as for delivery trucks and commodity brokers. They are SPECIFICALLY getting extra bandwidth to compete with wireless Internet, cellular and beeper networks that have had to pay auctions for their spectrum!

VCPP ADDENDUM-COMMENT:]
VERY INTERESTING CONTRADICTION OF EARLIER REQUESTS FOR INFORMATION:
Page 16:

"Moreover, if proponents' claims are correct, the enhanced robustness of IBOC systems could help eliminate or ameliorate interference now experienced by grandfathered short-spaced radio stations ..."
SN] What is interesting is the main reason given by opponents to the new Low Power FM service was that allowing us to use 3rd and 2nd adjacent frequencies to the full power stations would cause interference that would destroy IBOC.
Well then, what of the 2nd adjacent FULL power Grandfathered stations? NOW they are saying IBOC will *reduce* their interference!!

Page16:
VCPP ADDENDUM-COMMENT:]
Finally, the FIRST sign that the FCC has even CONSIDERED new applicants!!
A Eureka system with ownership restrictions would create more opportunity than anything else they could possibly come up with.

Page17
"42"The new spectrum approach would permit the use of a DAB system that is completely independent of the existing analog AM and FM radio systems. We request comment on whether independence from existing AM and FM radio systems would provide greater flexibility in planning and implementing DAB service. An independent DAB transmission system might operate at a higher data rate and thereby support higher audio quality and enhanced ancillary services as compared to an IBOC system operating in hybrid mode."

VCPP ADDENDUM-COMMENT:]
The FCC displays an unfortunate prejudice toward a mandatory sunsetting of analog FM:

Page 18:

> "43 Any reallocation of the 82-88mHz band for DAB service should facilitate the transition to a final DAB spectrum plan that would include the existing FM radio spectrum. For example, when DAB is accepted by consumers and proves successful, the existing adjacent FM spectrum at 88-108mHz could be converted to DAB. Under such a plan .... however such a transition could result in significant service disruptions. It would require broadcasters to choose between serving listeners with analog receivers or listeners with digital receivers. Significant listener dislocations could occur at the point of a 'hard' transition to digital transmissions ..."

VCPP ADDENDUM-COMMENT:]
The FCC inexplicably seems to say early on in the document that one of the wonderful reasons for radio is locality ... then here on page 19 they are showing prejudice toward the Broadcast Trust:

> "47 Should all AM and FM broadcasters be eligible for a DAB license in any new spectrum made available? Should we exclude DAB licenses in the new spectrum from the local ownership limits that apply to analog stations?

VCPP ADDENDUM-COMMENT:]
THEN they bring up going the other way:

> "To what extent should new channels be reserved for educational use and new entrants? Should we limit each applicant to a maximum number of DAB licenses in each market? How would the issuance of these licenses implicate our statutory requirements with respect to auctions?"(94)
>
> "48 We also request comment on what approach could be used to specify the initial DAB channel allotments under a new spectrum approach."

VCPP ADDENDUM-COMMENT:]
For the purpose of allocation, redefine the term "efficiency" away from a lazy engineering perspective of maximum irradiation of space per one channel to a "Democratic Efficiency" that maximizes the number of voices.
Thus recommendation: 100kHz stations of a maximum of 1000 watts each, booster stations allowed until that signal is halfway to the next major metro. Only 1st adjacent frequencies are protected. The stations will start at one end of the spectrum and be stacked up to the other end with all the antennas starting off from some location central to the metro area agreed upon by the a local committee made up of the stakeholdes of the township central to the metro area.
At the beginning of the DAB process, same ownership restrictions as the LPFM. Then after three years, incumbents are allowed to have one station per owner per metro. After 10 years they will be allowed up to 5 per metro and 50 for the nation. All DAB frequencies are to be auctioned, no give-away of public spectrum!

Note that I am obviously discounting comments that "existing broadcasters are best equipped for a quick transition to digital."

Since when is it the job of regulators to ensure that regulatees be the first to get a public freebie to the expense of competitors and new entrants to the market? The impression left by the 1996 Telecom Act is supposedly to increase the number of new entrants, not to reduce them!!

Sincerely, Chris Maxwell Chris Maxwell

8/8